GANSHIN, A.A.

Regarding a certain article. Der.i lesokhim.prom. 2 no.11:30 N '53.
(MLRA 6:11)
(Steam boilers)

GANSHIN, A. A.

GANSHIN, A.A.

Improvement of rosin-distilling apparatus. Der. i lesokhim.prom. 3 no.6:10-14 Je '54. (MLRA 7:7)

1. Glavlesokhim.
(Resins) (Wood distillation) (Distillation apparatus)

GANSHIN, A.A.

From the practice of chemical water purification at the enterprises of the Main Administration of the Wood-Chemical Industry. Der. i lesokhim. prom.3 no.11:28 N '54. (MLRA 7:12)

1. Glavleskhim.
(Feed-water purification)

GANSHIN, A.A.

Welded structures for dry-distilling lorry-type retorts. Gidrolis. i lesokhim prom. 8 no.2:27-28 '55. (MIRA 8:10)

1. Glavnyy energetik Glavleskhima
(Wood distillation)

GANSHIN, A.

A continuous charcoal kiln. (From:"Continuous carbonization of wood. SIFIC process." A.Lambiotte. Bulletin 37. Northeastern Wood Utilization Council, Inc.). Gidrolis. i lesokhim.prom. 8 no.5:30-32 '55. (MLRA 9:1)
(Charcoal) (Kilns)

GANSHIN, A.A.

Simplified proportioning of chemicals in purification of water by chemical means. Gidroliz. i lesokhim. prom. 11 no.5:25 '58. (MIRA 11:9)

1. Giproleskhim.

(Water--Purification)

GANSHIN, A.A.; MAKAROVA, G.A.

Determination of the heat transfer coefficient of heat exchangers under operational plant conditions. Gidroliz. i lesokhim.prom. 13 no.7:21-22 '60. (MIRA 13:10)

1. Giproleskhim (for Ganshin). 2. Vakhtanskiy kanifol'noekstraktsionnyy zavod (for Makarova).
(Heat exchangers) (Heat--Transmission) (Wood--Chemistry)

GANSHIN, A.A.

About K.D. Martynenko's book "Processes, apparatus, and equipment of hydrolysis and wood-chemistry product industries." Gidroliz. i lesokhim. prom. 15 no.7:22-23 '62. (MIRA 16:8)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy lesokhimicheskoy promyshlennosti.
(Hydfolysis) (Wood---Chemistry)

USSR/Chemistry - Acid-proof materials FD-1556

GANSHIN, A.S.

Card 1/1 : Pub. 50-13/25

Author : Ganshin, A. S.

Title : The new acid-proof packing KNP-4

Periodical : Khim. prom., No 8. pp 494-95 (46-47), Dec 1954

Abstract : Describes the production of the packing KNP-4, which is to be used in the stuffing boxes of acid pumps. KNP-4 is prepared by treating chrysotile asbestos with a mixture of synthetic resin, rubber, plasticizers, and graphite diluted with a solvent, and then dipping it into a hot mass consisting of petroleum products.

Institution : The Yegor'yevsk Plant ATI, Ministry of Chemical Industry USSR

Submitted :

BOROKHOV, I.M.; GANSHIN, A.S.; MAKAR'IN, N.M., inzh., red.; PROKOF'YEVA, L.G., red.izd-va; UVAROVA, A.F., tekhn.red.

[Fibrous and combined gland packings] Voloknistye i kombinirovannye sal'nikovye nabivki. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 181 p. (MIRA 12:12)
(Packing (Mechanical engineering))

GANSHIN, G.A.

CH'U, Shao-t'ang [author]; GANSHIN, G.A. [editor]; GINGOL'D, L.S.; LEDOVSKIY, A.M. [translators].

[Geography of new China] Geografiia Novogo Kitaia. Perevod s kitaiskogo L.S.Gingol'da i A.M.Ledovskogo. Moskva, Izd-vo inostrannoi lit-ry, 1953. (MLRA 7:1)

(China--Physical geography) (Physical geography--China) (China--Geography, Economic) (Geography, Economic--China)

GANSHIN, Georgiy Aleksandrovich; LEPNIKOVA, Ye., redaktor; MUKHIN, Yu., tekhnicheskiy redaktor

[Chinese People's Republic on the road to socialist industrialization] Kitaiskaia Narodnaia Respublika na puti sotsialisticheskoi industrializatsii. Moskva, Gos.izd-vo polit.lit-ry, 1955. 190 p. (China--Industrialization) (MLRA 9:3)

30(1,5) PHASE I BOOK EXPLOITATION SOV 2275

Ganshin, Georgiy Aleksandrovich

Ekonomika Kitayskoy Narodnoy Respubliki (Economy of the Chinese People's Republic) Moscow, Izd-vo IMO, 1959. 356 p. 4,000 copies printed.

Sponsoring Agency: Institut mezhdunarodnykh otnosheniy.

Ed.: V. D. Shchetinin; Tech. Ed.: N.A. Belyayev.

PURPOSE: The book is intended for economists and laymen interested in the development of China.

COVERAGE: The book contains information on the economic system and conditions in the Chinese People's Republic. Data on individual branches of Chinese industry are available. Main emphasis is put on the organization of the socialist economy and its functioning. For comparison a historical sketch is given for each of the major branches of economic activity, such as agriculture, industry, commerce, and transport. There are numerous tables and several maps. The author thanks A. Chekhutov of the Institute of Sinology, Academy of Sciences,

Card 1/13

USSR, who compiled Chapter IX, and M. Klimova of the same Institute who compiled the Russian-Chinese dictionary of economic terms. The terms are listed in both Chinese characters and Russian (Cyrillic) transliteration. The bibliography lists works on economics by Chinese and Russian authorities.

TABLE OF CONTENTS:

Economy of the Chinese People's (Cont.) SOV/2275

Card 4/13

AVAILABLE: Library of Congress

Card 13/13

IS/fal
10-5-59

PELESHOK, A.G., inzh.; GANSHIN, L.G., inzh.; BIRMAN, L.G., inzh.

Experience gained in the operation of the leading model of the BKZ-100 GM boiler. Elek. sta. 34 no.8:4-7 Ag '63. (MIRA 16:11)

ILIVITSKIY, A. A.; NIKOLIN, V. I.; DUBYNIN, N. G.; GAN'SHIN, L. P.; RYABCHENKO, Ye. P.; SVAROVSKIY, B. M.; TREGUBOV, B. G.; TRUFAKIN, N. Ye.

"Determining the properties of rocks" by L. I. Baron, B. M. Loguntsov, and E. Z. Pozin. Reviewed by A. A. Ilivitskii and others. Gor. zhur. no.10:77-78 O '62. (MIRA 15:10)

1. Institut gornogo dela Ural'skogo filiala AN SSSR, Sverdlovsk (for Ilivitskiy, Nikolin). 2. Institut gornogo dela Sibirskogo otdeleniya AN SSSR, Novosibirsk (for Dubynin, Gan'shin, Ryabchenko, Svarovskiy, Tregubov, Trufakin).

(Rocks—Testing) (Baron, L. I.)
(Loguntsov, B. M.) (Pozin, E. Z.)

GAN'SHIN, N.N., inzh.

The author is right, but not entirely. Avtom., telem. i sviaz' 8 no.4:41-43 Ap '64. (MIRA 18:2)

1. Gosudarstvennyy proyektno-izyskatel'skiy institut po proyektirovaniyu signalizatsii, tsentralizatsii, svyazi i radio na zheleznodorozhnom transporte.

GAN'SHIN, V. M., Cand Agr Sci -- (diss) "Growing of Seeds of Meadow Pasture Grasses in Grass Mixtures." Len, 1957. 20 pp (Min of Higher Education USSR, Len Agricultural Acad), 100 copies (KL, 48-57, 107)

GAN'SHIN, V.M., kand.tekhn.nauk

A useful book ("Measuring the settling and deformation of structures by geodetic methods" by P.I.Brait, E.N.Medvetskii. Reviewed by V.N.Gan'shin). Geod. i kart. no. 11:64-65 N '60. (MIRA 13:12)

(Surveying) (Building)

(Brait, P.I.) (Medvetskii, E.N.)

GAN'SHIN, V.N., prof., kand. tekhn. nauk

Formulas for azimuths and lengths of geodesic lines whose ends lie on the same parallel. Trudy vses. n.-i. in-ta zhel.-dor. transp. no.43 (MIRA 17:7)
3-4 '63

1. Leningradskiy institut inzhenerov zheleznodorozhnogo transporta.

GAN'SHIN, V.N.

Adjustment of equidistant elevations obtained by geodetic leveling. Izv.AN Kazakh.SSR.Ser.geog.no.2:93-101 '48.
(Altitudes--Measurements) (MLRA 9:6)

GAN'SHIN, V.N.; KHRENOV, L.S.

The most advantageous form of interpolating grid.
Izv.AN Kazakh.SSR.Ser.geog. no.2:102-105 '48.
(Topographical surveying) (MLRA 9:6)

GAN'SHIN, V.N.

Tacheometric tables. Sbor. st.po geod. no.6:65-67 '54.
(MLRA 9:6)

(Tachymeter) (Geodesy--Tables, etc.)

GAN'SHIN, V. N.

"Mathematical Processing of Observations Similar in Form With Directional Observations".
Sb. statey po geodezii, No. 8, pp 27-40, 1954.

A general theory of balacing the results of direction measurements carried out in arbitrary programming is described. A "method of cycles" is suggested, a "cycle" being a set of n operations. (RZhAstr, No. 1, 1956)

SO: Sum No 884, 9 Apr 1956

GAN'SHIN, Vladimir Nikolaevich.

Tachymetric tables for the calculation of vertical and horizontal distances in working with circular tachymeters and plane-table alidades Izd. 2., perer. Moskva, Goslesbumizdat, 1955. 247 p. (55-44248)

1. Surveying - Tables, etc.
2. Tachymeter.
3. Leveling. I. Khrenov, L. S.

TA552.G2 1955

GAN'SHIN, V.N., kandidat tekhnicheskikh nauk, dotsent.

New method of solving the principal geodetic problems.
Sbor.st.po geod. no.9:67-78 '55. (MIRA 9:6)
(Geodesy)

GAN'SHIN, V.N.

Graphic analytical method for determining reduction elements. Sbor. st.po geod.no.10:49-54 '55. (MLRA 10:2)
(Surveying)

GAN'SHIN, V.N.

"Eight-place tables of trigonometric functions." Reviewed by V.N. Gan'shin. Sbor.st.po geod.no.10:121-125 '55. (MLRA 10:2)
(Trigonometrical functions)

GAN'SHIN, Vladimir Nikolayevich; BOL'SHAKOV, Nikolay Nikolayevich; KOMAR'KOVA, L.M., red.izd-va; ROMANOVA, V.V., tekhn.red.

[Fedor Alekseevich Sludskii; the geodesist] Fedor Alekseevich Sludskii, uchenyi geodezist. [n.p.] Izd-vo geodez. lit-ry, 1957. 154 p. (MIRA 11:5)
(Sludskii, Fedor Alekseevich, 1841-1897)

GAN'SHIN, V.N., kand.tekhn.nauk.

Directional adjustment of traversing networks. Geod.i kart. no.8:16-21 Ag '57. (MIRA 10:10)
(Traverses (Surveying))

GAN'SHIN, Vladimir Nikolayevich; KHRENOV, Leonid Sergeyevich; BARINOV, V.A., red.; FUKS, Ye.A., red.izd-va; SHITS, V.P., tekhn.red.

[Tables for laying out circular curves] Tablitsy dlia razbivki krugovykh krivykh. Moskva, Goslesbumizdat, 1958. 258 p. (MIRA 13:1)

(Surveying--Tables, etc.)

GAN'SHIN, V.N., kand.tekhn.nauk

Formulas for solving geodetic problems related to spheroids. Geod. i kart. no.1:8-14 Ja '58. (MIRA 11:4)
(Geodesy)

SOV/154-58-2-3/22

AUTHOR: Gan'shin, V. N., Docent, Candidate of Technical Sciences

TITLE: A Comparison of the Lengths of the Normal Section and the Geodesic Line (Sravneniye dlin normal'nogo secheniya i geodezicheskoy linii)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 2, pp 33-41 (USSR)

ABSTRACT: Since it is at present highly necessary to obtain the difference D_s between the lengths of a normal section and the geodesic line in measuring great lengths without a limitation with regard to σ such a method is presented in the article. In solving this problem - to compute D_s with a standard accuracy (with the errors in the terms containing e^6) - it suffices to assume that the values U_1, U_2, U, A_1, A_2 A, and σ_1 and σ_2, contained in the formulae (85/167), (85/168), and (78/146), are elements of a spherical triangle (The formulae were derived by F. A. Sludskiy, Ref 1). Here, formula (16) for D_s is derived. It is incorrect by e^6, but more accurate than the current formula in which the term

Card 1/2

Comparison of the Lengths of the Normal Section and the Geodesic Line

containing σ^6 is greater by a factor of 5. Formula (16) can be transformed into formula (17) to be used in the case of a relative error of 5 per cent. There are 1 figure, 1 table, and 3 references, 3 of which are Soviet.

ASSOCIATION: Stalingradskiy institut inzhenerov gorodskogo khozyaystva (Stalingrad Institute for Communal Economy Engineers)

SUBMITTED: November 20, 1957

SHIN, V N

AUTHOR: None Given

6-58-4-18/16

TITLE: Chronicle (Khronika)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 4, pp. 79-80 (USSR)

ABSTRACT: From February 15, to February 22, 1958 the XII. Scientifical and Technical Conference took place at the Novosibirsk Institute of Engineers of Geodesy, Aerial Photography, and Cartography. The results obtained by the work performed by the Institute in 1957 were made known. The conference was attended by about 200 geodesists and cartographers of 20 scientific- and production-organizations of Novosibirsk, Stalingrad, Kuybyshev, Sverdlovsk, Omsk, Tomsk, Abakan, Krasnoyarsk. Among them were the geodesists occupied with building the hydraulic power plants of Kuybyshev, Novosibirsk and Krasnoyarsk. Lectures delivered at the plenary session: S.A.Kapustin on "Critique of Modern Reformist Theories of State Monopoly Capitalism", R.G.Bannova on "The Penetration of Marxist Ideas into Russia between the Fourties and Seventies of the 19th Century", N.V.Shubin on "Soviet Geodesy and Cartography on the Occasion of the 40th Anniversary of the Great Socialist October Revolution", M.N.Kolobkov on the "Unified Power System of Central

Card 1/3

Chronicle

Siberia and its Importance for the Economic Development of this Region" . The following 15 lectures were delivered at the sessions of the department for geodesy: Docent A.I.Agroskin "On the Problem of Angle-Observation in Triangulation" (by which the opinion expressed by Yu.A.Aladzhalov is refuted). Docent V.N.Gan'shin "Efficient Methods of Solving Major Geodetical Problems". Docent A.V.Butkevich "On the Elimination of Successive Approximation in Some Geodetical Calculations". Docent A.A.Vizgin and V.P.Napalkov "The Analysis of the Accuracy of Geodetic Leveling". Chief Engineer I.Ye.Donskikh of the geodetical sector of the Orgenergostroy on "Experience Gathered in Connection with the Determination of Coordinates in the Dam-Tunnel of the Kuybyshev Hydraulic Power Plant". A.A.Meshcheryakov, Candidate of Technical Sciences on "The General Theory of Euler Projection". Chief Geodesist V.P.Utin of the Lengidep Expedition on "Geodetical Work Carried out on the Building Site of the Krasnoyarsk Hydraulic Power Plant". Docent G.I.Znamenshchikov "On the Reducing of the Length of Curved Lines Measured on Maps to the Scale of 1 : 1". (Here it is shown that the method developed by Professor N.M.Volkov has some basic faults). Chief of the Geological Research Expedition of Omsk, Candidate of Technical Sciences D.N.Fialkov on "The Qualitative Characteristic of Vertical Motions of the Earth's

Chronicle

6-58-4-18/18

Crust in the Steppe Region on the River Irtysh". Docent V.V.Yegorov "Modern Large-Scale Topographical Maps and Ways and Means of Attaining their Further Improvement". I.I.Markson "The Demands made with Respect to the Representation of Soil Vegetation on Large-Scale Topographical Maps".
Professor K.L. Provorov, director of the NIIGAiK, in closing the conference, gave a summary of the results obtained.

AVAILABLE: Library of Congress

1. Geodetics--Conference 2. Aerial photography--Conference
3. Cartography--Conference

Card 3/3

3(4) SOV/154-58-6-3/22

AUTHOR: Gan'shin, V. N., Docent, Candidate of Technical Sciences

TITLE: Formulae for the Solution of Geodetic Tasks on the Spheroid by Means of Geodetic Coordinates (Formuly dlya resheniya geodezicheskikh zadach na sferoide po geodezicheskim koordinatam)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 6, pp 11-18 (USSR)

ABSTRACT: In a former paper (Ref 3) the author showed quite a simple solution of geodetic problems concerning the elements of normal sections, using for the solution the reduced widths of the points. Further investigations by the author showed that by going the same way it is possible to manage with the geodetic widths of the points only. Here such a solution is presented. The formulae given in reference 3 permit to solve the direct problem without being forced to use the method of approximation in passing over from the azimuth on the ellipsoid $\alpha_{1,2}$ to the azimuth of sphere $A_{1,2}$. As to the solution of the inverse problems, the solutions by both methods are equivalent. A numeric

Card 1/3

Formulae for the Solution of Geodetic Tasks on the Spheroid by Means of Geodetic Coordinates

example is given here showing that the results hardly differ from those obtained by the other method in the former paper. - Among all solutions of similar kind, the one by M. Cimbálnik (Tsimbal'nik) is most consistent (Ref 5). The formulae by Cimbálnik are given. The formulae given here and in the former paper differ from those by Cimbálnik by the absence of elements pertaining to the axes of orthogonal coordinates. The part of auxiliary quantities is played by the elements of the spherical triangle. This is approximately equal to the corresponding polar triangle lying on the surface of the ellipsoid of revolution. This gives the possibility of passing from the solution of the spheroidal triangle to the solution of the spherical triangle. - The spherical auxiliary triangles used here show a certain geometric interpretation. This is connected with the representation of the "central curve" of the ellipsoid on the spherical surface. The "central curve" is the trace of the ellipsoid section with the plane going through its middle. The formulae derived here and in the former paper permit to obtain not only the formulae for the arc of the meridian and the arc

Formulae for the Solution of Geodetic Tasks on the Spheroid by Means of Geodetic Coordinates

of the vertical circle but - as special cases - also those for the arc of the "central curve". There are 2 figures, 6 tables, and 6 references, 4 of which are Soviet.

ASSOCIATION: Stalingradskiy institut inzhenerov gorodskogo khozyaystva (Stalingrad Institute for Engineers of Municipal Economy)

SUBMITTED: April 10, 1958

Card 3/3

AUTHOR: Gan'shin, V. N., Candidate of Technical Sciences 6-58-6-5/21

TITLE: The Derivative of the Modulus of a Function Connected With the Solving of Some Geodetical Problems (Differentsirovaniye modulya funktsii v svyazi s resheniyem nekotorykh geodezicheskikh zadach)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 24 - 26 (USSR)

ABSTRACT: In solving various geodetical problems it is sometimes necessary to determine the derivative of the modulus of a function of one independent variable. In the publications known to the author no rules for the differentiation of such a function are found. These rules are deduced and it is shown by some examples, how these formulae are used in practice. The author proceeds from $\left[|f(x)|\right]^2 = \left[f(x)\right]^2$, where $f(x)$ is an arbitrary function with the derivative $\frac{df(x)}{dx}$. It follows, that $|f(x)| \frac{d|f(x)|}{dx} = f(x) \frac{df(x)}{dx}$.

Card 1/2

The Derivative of the Modulus of a Function Connected With the Solving of Some Geodetical Problems

6-58-6-5/21

From this

$\frac{d|f(x)|}{dx} = \frac{f(x)}{|f(x)|} \cdot \frac{df(x)}{dx}$ is obtained, if $f(x) \neq 0$. Thus the derivative of a given function different from zero equals the derivative of the function times ± 1, the sign agreeing with the sign of the value of the function. If $f(x)$ is denoted by y and $f'(x)$ by y', these formulae are obtained (2):

$$|y'| = \frac{y}{|y|} y'$$

$$|y''| = \frac{y}{|y|} y''$$

..... etc.

The method is explained by two examples. There is 1 Soviet reference.

1. Geodesics--Theory 2. Mathematics 3. Functions

Card 2/2

3(4)

AUTHOR: Gan'shin, V. N., Canditate of Technical Sciences SOV/6-58-10-8/17

TITLE: Construction of the Grades and Lines With the Help of Angle Intersecting(Postroyeniye stroitel'noy setki metodom uglovykh zasechek)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 10, pp 43-45 (USSR)

ABSTRACT: The construction of a rectangular lines and grades system generally proceeds in two stages: First the points of the base net are determined according to a low-accuracy method. Subsequently these points which are marked in the terrain by temporary stations are surveyed with a higher accuracy in order to determine the coordinates of the lines and grades net. In this procedure, various methods may be employed. This paper includes a description of one of these methods, which is elucidated with an example. There are 1 figure , 1 table , and 2 references, which are Soviet.

Card 1/2

Construction of the Grades and Lines With the Help of 307/6-58-10-8/17
Angle Intersecting

Card 2/2

3(4)
AUTHOR: Gan'shin, V. N., Candidate of Technical Sciences

SOV/6-58-12-12/14

TITLE: On the Book by Z. K. Novokshanova "Karl Ivanovich Tenner, a Military Land Surveyor" (O knige Z. K. Novokshanovoy - Karl Ivanovich Tenner voyennyy geodezist)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 12, pp 68-71 (USSR)

ABSTRACT: It is a biography of one of the most important Russian land surveyors in the first half of the 19th century, giving a true picture of the geodetical work at that time. Some inaccuracies and errors in the representation are pointed out.
There is 1 Soviet reference.

Card 1/1

3(4) SOV/154-59-4-15/17

AUTHORS: 1)Khrenov, L. S., Professor, 2) Gan'shin, V. N., Docent

TITLE: Theoretical and Practical Problems of the Application of Geodesy in Industrial Architecture (Voprosy teorii i praktiki primenenniya geodezii v promyshlennom stroitel'stve)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1959, Nr 4, pp 123 - 128 (USSR)

ABSTRACT: This is a book review of a monograph by Professor B. I. Gerzhula. In this monograph the scientific elaboration of questions from theory and practice on the application of geodesy in the field of industrial architecture is given. In the introduction the author analyses the importance of geodesy for the erection of engineer constructions and industrial constructions and defines the concept of the general plan and of the basic principles for the planning of the building site of industrial constructions. The book consists of three chapters. The first chapter deals with the question of the application of geodesy for the setting-up of a plan for the organisation of the ground for an industrial building. The second chapter discusses the application of the general-

Card 1/2

Theoretical and Practical Problems of the Application SOV/154-59-1-15/17
of Geodesy in Industrial Architecture

plan project to nature and the constructions of buildings. The third chapter is dedicated to the preparation and establishment of the executive general plan for industrial construction. The various statements are discussed here and some critical remarks concerning the work are made, which as such is very valuable and useful. There are 5 Soviet references.

ASSOCIATION: 1)Moskovskiy institut inzhenerov vodnogo khozyaystva (Moscow Institute for Water Engineers) 2) Stalingradskiy institut inzhenerov gorodskogo khozyaystva (Stalingrad Institute for Municipal Engineers)

SUBMITTED: October 20, 1958

Card 2/2

SOV/6-59-8-5/27

3(4)

AUTHOR: Gan'shin, V. N., Candidate of Technical Sciences

TITLE: On the Method of Adjusting Polygonal Course Nets Suggested by V. F. Antonyuzhenko (O sposobe uravnivaniya poligonometricheskikh setey, predlozhennom V. F. Antonyuzhenko)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 8, pp 28-30 (USSR)

ABSTRACT: V. F. Antonyuzhenko (Ref 1) suggested a highly original method for the solution of conditional equations with unknown numbers. This method, however, does not correspond with the method of the least squares. This is shown in the present paper. For this reason the method cannot be recommended as an exact solution for all polygonal courses. There is 1 Soviet reference.

Card 1/1

GAN'SHIN, Vladimir Nikolayevich; VENTTSEL', M.K., prof., retsenzent; FLORENT'YEV, V.B., spetsred.; VASIL'YEVA, V.I., red.izd-va; ROMANOVA, V.V., tekhn.red.

[Nikolai IAkovlevich TSinger; geodesist, astronomer, and cartographer] Nikolai IAkovlevich TSinger; geodezist, astronom i kartograf. Moskva, Izd-vo geodez.lit-ry, 1960. 113 p. (MIRA 13:6)

(TSinger, Nikolai IAkovlevich, 1842-1918)

GAN'SHIN, V.N., dotsent, kand.tekhn.nauk

Group observation of directions from triangulation stations.
Izv.vys.ucheb.zav.; geod.i aerof. no.1:121-128 '60. (MIRA 13:6)

1. Stalingradskiy institut inzhenerov gorodskogo khozyaystva.
(Triangulation)

3(4), 25(2)
AUTHORS: Gan'shin, V. N., Khrenov, L. S.

S/006/60/000/02/018/024
B007/B011

TITLE: On the Book by B. D. Yarovoy "Kratkiy ocherk razvitiya geodezicheskogo instrumentostroyeniya v SSSR" ("Brief Outline of the Development of the Geodetic Instrument Construction in the USSR")

PERIODICAL: Geodeziya i kartografiya, 1960, Nr 2, pp 65-68 (USSR)

ABSTRACT: This is a book review. The book consists of two parts, the first covers the time until 1917, the second from 1917 to 1950. It is written well and clearly, is amply illustrated with pictures, drawings and figures. A number of deficiencies, to be taken account of in the next edition, is pointed out here. The second part is only briefly outlined, and whole groups of instruments are left unconsidered. The following Russian names are mentioned in the first part: mechanic V. F. Gerbst, geodesist P. A. Mionchinskiy, Yu. V. Port, Tenner, mechanic G. K. Brauer, N. Ya. Tsinger, Repsol'd, colonel Ernfel't, astronomist V. K. Delen, O. V. Struve, Sire, Roskovich, the firm Gerlyakh, Ginsberg, the factories of Tryndin, Gromov and Tauber-Tsvetkov, mechanic P. A. Zarubin, engineer V. T. Odner.

Card 1/2

On the Book by B. D. Yarovoy "Kratkiy ocherk razvitiya geodezicheskogo instrumentostroyeniya v SSSR" ("Brief Outline of the Development of the Geodetic Instrument Construction in the USSR")

S/006/60/000/02/018/024
B007/B011

prince Volkonskiy. The article by B. A. Larin is mentioned for the time after 1917. There are 1 figure and 4 Soviet references.

Card 2/2

GAN'SHIN, V.N., dotsent, kand.tekhn.nauk

Fundamental properties of a plane curve on the ellipsoid of revolution. Izv. vys. ucheb. zav.; geod. i aerof. no.5:3-7 '60. (MIRA 13:12)

1. Stalingradskiy institut inzhenerov gorodskogo khozyaystva.
(Geodesy)

S/006/60/000/06/21/025
B007/B005

AUTHOR: Gan'shin, V. N., Candidate of Technical Sciences

TITLE: On the Problem of Resolving Triangles Formed by Chords (Dealt With in an Article by M. I. Yurkina)

PERIODICAL: Geodeziya i kartografiya, 1960, No. 6, pp. 67 - 72

TEXT: V. N. Gan'shin, Candidate of Technical Sciences, author of the book "Fedor Alekseyevich Sludskiy", thanks M. I. Yurkina, Candidate of Technical Sciences, (Ref., Footnote on p. 67) for some hints and the quotation of I. D. Zhongolovich's opinion on the importance of F. A. Sludskiy's works. At the same time, the author considers her reproaches of having neglected the works of contemporaries to be unjustified. The author points out that M. I. Yurkina often quotes a single sentence without any connection, and thus arrives at incorrect conclusions. This is illustrated by examples. The principal subject, namely, the evaluation of the chordal method, is also described, and it is shown that formulas (14) and (15) are simpler than the corresponding formulas (12) and (13), which fact is also stressed

Card 1/2

On the Problem of Resolving Triangles Formed by Chords (Dealt With in an Article by M. I. Yurkina) S/006/60/000/06/21/025 B007/B005

in the book, and therefore one cannot agree to M. I. Yurkina's opinion. Krasovskiy, V. V. Buzuk (Ref., Footnote on p. 68), and M. S. Molodenskiy, Corresponding Member of the Akademiya nauk SSSR (Academy of Sciences of the USSR), are mentioned. There are 3 Soviet references.

Card 2/2

GAN'SHIN, V.N., dotsent, kand.tekhn.nauk

Geometrical analysis in the solution of geodetic problems. Izv. vys. ucheb. zav.; geod. i aerof. no.3:131-138 '60. (MIRA 13:10)

1. Stalingradskiy institut inzhenerov gorodskogo khozyaystva.
(Geodesy)

13,2300
3,4000

S/154/60/000/005/001/008
B012/B060

AUTHOR: Gan'shin, V. N., Candidate of Technical Sciences, Docent

TITLE: Main Properties of the Setting Curve on the Ellipsoid of Revolution

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1960, No. 5, pp. 3 - 7

TEXT: Distant points on the earth's surface can be interconnected by curves, such as a setting curve. If the latter connects two points P_1 and P_2, the normal plane passing through P_1 must also pass through P_2. On this premise it is shown that the setting curve on an ellipsoid of revolution is a curve of intersection of the ellipsoid of revolution with a hyperbolic paraboloid (with equal parameters p and q). It follows from the definition of the setting curve that the azimuths of this curve coincide at the end points with the azimuths of the respective normal sections. The length $S_{1,2}$ of an arbitrary curve connecting two points (with the reduced widths u_1 and u_2) on the ellipsoid of revolution is expressed in terms of

Card 1/3

a determined integral. To calculate the derivative dl/du contained in this integral it is necessary to use the equation of the curve concerned. The author did not succeed in obtaining an expedient formula for $S_{1,2}$ for the case of the setting curve. It is, however, pointed out that when restricting oneself to an approximate solution, one may follow the course indicated by F. A. Sludskiy (Ref.1). The latter showed that for two sufficiently near ellipsoid points, the difference between the length of the setting curve and the length of the geodetic line is four times as small as the difference between the length of the normal curve of intersection and the length of the geodetic line. Such a comparison was not made for points distant from one another. Formula (12)

$$D_s = \frac{\sigma_{12}^5 ae^4}{1440} \sin^2 2A_1 \cos^4 u_1$$

is derived here for the difference D_s between the length of the geodetic line and the length of the setting curve. F. A. Sludskiy obtained the same formula. e is the eccentricity of the ellipsoid, a is the semimajor axis of the ellipsoid. A_1 is the azimuth of the great circle curve at the point

Main Properties of the Setting Curve on the Ellipsoid of Revolution

S/154/60/000/005/001/008
B012/B060

with the width u_1. $f(\sigma)$ is the function determining the difference between the length of points on the setting curve and the length of the points on the geodetic line on one and the same meridian. There are 2 Soviet references.

ASSOCIATION: Stalingradskiy institut inzhenerov gorodskogo khozyaystva (Stalingrad Institute for Engineers of the Municipal Services)

SUBMITTED: June 9, 1960

Card 3/3

GAN'SHIN, V.N., kand.tekhn.nauk; DETISTOV, A.I.

Crossing of large bodies of water with leveling. Geod. i kart. no.8:19-23 Ag '60. (MIRA 13:10)
(Leveling)

GAN'SHIN, V.N., kand.tekhn.nauk

Computing the correction for slope by elevation. Geod. i kart. no.9:66-67 S '60. (MIRA 13:11)
(Surveying)

GAN'SHIN, Vladimir Nikolayevich; KHRENOV, Leonid Sergeyevich, prof.; LARCHENKO, Ye.G., red.; MEL'NIKOVA, A.G., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Tachymetric tables for calculating heights and ground distances using a circular tachymeter and alidade] Takheometricheskie tablitsy dlia vychislenii prevyshenii i gorizontal'nykh prolozhenii pri rabote s krugovym takheometrom i kipregelem. Izd.3., dop. Moskva, Goslesbumizdat, 1961. 251 p. (MIRA 15:1)
(Surveying—Tables etc.)

GAN'SHIN, Vladimir Nikolayevich; KHRENOV, Leonid Sergeyevich, prof.; LARCHENKO, Ye.G., red.; VASIL'YEVA, V.I., red.izd-va; ROMANOVA, V.V., tekhn.red.

[Tables for geodetic leveling] Tablitsy dlia geodezicheskogo nivelirovaniia. Moskva, Izd-vo geodez.lit-ry, 1961. 132 p. (MIRA 15:2)

(Surveying--Tables, etc.)

12022

S/154/61/000/001/001/003
D054/D113

Z.4000(1121, 1128)

AUTHOR: Gan'shin, V.N., Candidate of Technical Sciences, Docent

TITLE: Adjustment of levelling nets of the general type

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, no. 1, 1961, 21-25

TEXT: The author proposes a series of equations for strictly adjusting levelling nets of the general type with stations from which more than two radial points were simultaneously surveyed. The lack of methods for precisely levelling these nets was pointed out by Candidate of Technical Sciences, Docent I.I. Kupchinov (Ref. 3: Nivelirovaniye poverkhnosti [Levelling of a surface]. Izvestiya vysshikh uchebnykh zavedeniy. Razdel Geodeziya i aerofotos"yemka. Vyp. 3, 1959, str. 85-86). The problem of adjusting levelling nets with only one relative height was solved by Professor A.S. Chebotarev (Ref. 1: Geodeziya [Geodesy]. M., Geodezizdat, Ch. II, 1949) and Professor V.V. Popov (Ref. 2: Uravnoveshivaniye poligonov [Adjustment of polygons]. Izd. 8, M., Geodezizdat, 1954). Assuming that a levelling net composed of n points is levelled from m stations, let us mark the reading on the i point taken from the j station by $a_{i,j}$, the weight of the reading -

Card 1/13

Adjustment of levelling nets...

by $p_{i,j}$ (in particular cases this weight can be equal to 0), the height of the i point by X_i and the level of the instrument at the j station - by Y_j. The most probable meaning of the values X_i (i = 1,2,3,...n) and Y_j (j = = 1,2,3,...m) is then found from the solution of the error equations (1,2)

$$\delta_{i,j} = X_i + a_{i,j} - Y_j \qquad (1)$$

$$i = 1, 2, 3, \ldots n; \; j = 1, 2, 3, \ldots m; \qquad (2)$$

under the condition of the minimum (3)

$$G = \sum_{i=1}^{n} \sum_{j=1}^{m} p_{i,j} \delta_{i,j}^2 = \text{minimum} \qquad (3)$$

In that case $\delta_{i,j}$ is the most probable error of the $a_{i,j}$ reading. Taking the partial derivatives of the function (3) in the usual order with respect to the variables X_1, $X_2 \ldots X_n$ and Y_1, $Y_2, \ldots Y_m$ and equalling them to 0,

Adjustment of levelling nets...

we arrive at the following:

$$\sum_{j=1}^{m} p_{i,j}\delta_{i,j} = 0, \qquad (4)$$

$i = 1,2,\ldots n,$

$$\sum_{i=1}^{n} p_{i,j}\delta_{i,j} = 0, \qquad (5)$$

$j = 1,2,\ldots m.$

From these $(m + n)$ equations we find

$$M_i X_i = \sum_{j=1}^{m} p_{i,j} Y_j - \sum_{j=1}^{m} p_{i,j} a_{i,j}, \qquad (6)$$

$$i = 1,2,\ldots n$$

$$N_j Y_j = \sum_{i=1}^{n} p_{i,j} X_i + \sum_{i=1}^{n} p_{i,j} a_{i,j}, \qquad (7)$$

$$j = 1,2,\ldots m;$$

Card 3/13

Adjustment of levelling nets...

where

$$M_i=\sum_{j=1}^{m} p_{i,j};\quad N_j=\sum_{i=1}^{n} p_{i,j}. \tag{8}$$

The unknown X and Y values are to be found from the joint solution of the equations (6) and (7). This can be achieved in three ways. 1st method - Calculation of the most probable point heights. By substituting the Y values from equation (7) in (6) the following "normal" system is obtained:

$$\left.\begin{aligned} &(M_1-M_{1,1})X_1-M_{1,2}X_2-\ldots-M_{1,n}X_n+R_1=0\\ &-M_{2,1}X_1+(M_2-M_{2,2})X_2-\ldots-M_{2,n}X_n+R_2=0\\ &\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\\ &-M_{n,1}X_1-M_{n,2}X_2-\ldots+(M_n-M_{n,n})X_n+R_n=0 \end{aligned}\right\} \tag{9}$$

where

$$M_{i,k}=\sum_{j=1}^{m}\frac{p_{i,j}p_{k,j}}{N_j};\quad i,k=1,2,\ldots n; \tag{10}$$

Card 4/13

Adjustment of levelling nets...

$$R_i = \sum_{j=1}^{m} p_{i,j}(a_{i,j} - a_{0,j}); \quad i = 1,2,\ldots n; \qquad (11) \qquad (11)$$

$$a_{0,j} = \sum_{i=1}^{n} \frac{p_{i,j} a_{i,j}}{N_j}; \quad j = 1,2,\ldots m. \qquad (12) \qquad (12)$$

For a direct definition of the value of the function (3), omitting the calculation of the δ values, we obtain

$$G = \sum_{i=1}^{n} \sum_{j=1}^{m} p_{i,j}(a_{i,j} - a_{0,j})^2 + \sum_{i=1}^{n} R_i X_i. \qquad (13)$$

The error of the weight unit μ will be determined by the equation

$$\mu = \pm \sqrt{\frac{G}{N+1-n-m}}. \qquad (14)$$

Card 5/13

Adjustment of levelling nets...

where N is the total number of readings made. If we consider that all readings $a_{i,j}$ were made with similar accuracy then we can assume that $p_{i,j} = 1$ for all points sighted from the j station (the weight is equal to 0 for all points not sighted from the given station). In this case all values included in the equation (9) are easy to understand and easily determined:

N_j - number of readings made on the j station;

$a_{o,j}$ - average reading for the j station;

$(a_{i,j} - a_{o,j})$ - "reading cited for the station";

R_i - the sum of "cited readings for the j station" in relation to the i point;

$M_{i,k}$ - the sum of values inverse to the N_j numbers for stations from which the i and k points had been sighted; and

M_i - the number of stations from which the i point was sighted.

Card 6/13

2nd method - Calculation of the most probable levels. Substituting the X values from equations (6) and (7) we obtain

$$\left.\begin{aligned}
&(N_1 - N_{1,1})\,Y_1 - N_{1,2}\,Y_2 - \ldots - N_{1,m}\,Y_m - S_1 = 0;\\
&-N_{2,1}\,Y_1 + (N_2 - N_{2,2})\,Y_2 - \ldots - N_{2,m}\,Y_m - S_2 = 0;\\
&\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\\
&-N_{m,1}\,Y_1 - N_{m,2}\,Y_2 - \ldots + (N_m - N_{m,m})\,Y_m - S_m = 0,
\end{aligned}\right\} \qquad (15) \qquad (15)$$

where

$$N_{j,v} = \sum_{i=1}^{n} \frac{p_{i,j}\,p_{i,v}}{M_i}; \quad j,v = 1,2,\ldots m; \qquad (16) \qquad (16)$$

$$S_j = \sum_{i=1}^{n} p_{i,j}\,(a_{i,j} - a_{i,0}); \quad j = 1,2,\ldots m; \qquad (17) \qquad (17)$$

$$a_{i,0} = \sum_{j=1}^{m} \frac{p_{i,j}\,a_{i,j}}{M_i}; \quad i = 1,2,\ldots n. \qquad (18) \qquad (18)$$

Adjustment of levelling nets...

The μ value is determined from the equation (14) whereas G can be found directly from the equation

$$G = \sum_{i=1}^{n} \sum_{j=1}^{m} p_{ij}(a_{ij} - a_{i,o})^2 - \sum_{j=1}^{m} S_j Y_j \qquad (19)$$

Provided that the weights of the readings are equal to 0 or 1 - all values can be easily understood and determined:

$N_{j,v}$ - The sum of values inverse to the M_i numbers for the i points sighted from the i and v stations;

M_i - number of readings made on the i point;

$a_{i,o}$ - average reading on the i point;

$(a_{i,j} - a_{i,o})$ - "cited reading for the point";

Card 8/13

S_j - the sum of "cited readings for the points" sighted from the j station; and

N_j - number of points sighted from the j station.

The obtained "normal" systems (9) and (15) are indefinite: the sums of the coefficients along the lines and columns are both equal to 0. This indefiniteness can be seen from the fact that if the system of $\overline{X}_1, \overline{X}_2, \ldots \overline{X}_n$, $\overline{Y}_1, \overline{Y}_2, \ldots \overline{Y}_m$ is the solution of the equations (1) and (2) under the condition (3), then any other system of the type $\overline{X}_1 + t, \overline{X}_2 + t, \ldots \overline{X}_n + t$, $\overline{Y}_1 + t, \overline{Y}_2 + t, \ldots \overline{Y}_m + t$, where t is a random number, will also be the solution of these equations under the condition (3). If the unknowns $X_1, X_2, \ldots X_n, Y_1, Y_2, \ldots Y_m$ are obtained for any random value (for instance $X_i = 0$ or $Y_i = 0$, etc) one solution of the a/m type will be obtained. By an expedient selection of coefficients in the complementary equation connecting the unknown values, a certain simplification of the solution can

Adjustment of levelling nets...

be obtained. 3rd method - Solution by the method of sequential approximations. Let us list the equations (6,7) in this form:

$$X_i = \sum_{j=1}^{m} \frac{p_{i,j}}{M_i} \left(Y_j = a_{i,j}\right), \quad (20)$$

[Abstracter's note: Obvious misprint. The second part should be $(Y_j - a_{i,j})$].

$$Y_j = \sum_{i=1}^{n} \frac{p_{i,j}}{N_j} \left(X_i + a_{i,j}\right). \quad (21)$$

With the help of some approximate values obtained for Y, the same approximate values for X are determined from the equation (20). Substituting these X values in the equation (21) consequent approximations for the Y values will be determined. The three a/m methods of adjustment are precise and suitable for any given levelling net. If a series of points 1, 2,...k has a definite height value, then, for adjusting in accordance with the a/m equations, it is sufficient to consider that these points were sighted

Adjustment of levelling nets...

from the (m + 1) station and the following readings were obtained:

$$a_{1,m+1} = Y_{m+1} - X_1;\ a_{2,m+1} = Y_{m+1} - X_2;\ \ldots, a_{k,m+1} = Y_{m+1} - X_k;$$

with the weight equal to infinity ($\delta_{i,m+1} = 0$), wherein Y_{m+1} is the random value. In this case, the a/m equations were given in another work by the author (Ref. 4: Gan'shin, V.N. Metodika nablyudeniya i uravnoveshivaniya triangulyatsionnykh stantsiy [Method of sighting and adjustment of triangulation stations]). Kandidatskaya dissertatsiya, Khar'kov, SKhI, 1949). Calculations will be much simpler if readings on each radial point are made from only two stations. In that case all the $a_{i,j}$ and $a_{i,v}$ ($i = 1,2,\ldots n$; $v = 1,2,\ldots m$) readings are replaced by the relative height $h_{j,v}$ which determines the difference between the levels of the instrument on stations v and j. The $h_{j,v}$ values are calculated from the equation

$$h_{j,v} = -h_{v,j} = \frac{\sum_{i=1}^{n} P_{i,v}(a_{i,v} - a_{i,j})}{P_{j,v}}, \qquad (22)$$

Card 11/13

Adjustment of levelling nets...

where

$$p^{i}_{j,v}=\frac{p_{i,j}p_{i,v}}{p_{i,j}+p_{i,v}};\ P_{j,v}=\sum_{i=1}^{n}P_{j,v_i} \qquad (23)$$

can be considered as measured directly with the weight equal to $P_{j,v}$.

The author further considers a more particular case of a levelling net described by I.I. Kupchinov (Ref. 3) [Abstracter's note: The case is not stated]. Here he finds that the strict adjustment of the net is quite simple and does not give place to any new methods of calculation; the adjustment can also be made by applying the method of equivalent substitutions. He also finds that the method of calculating the differences of levels of the instrument, as proposed by Kupchinov, is "homemade" and without sufficient theoretical substantiation and generalization. He stresses the importance of the method of work organization proposed by Kupchinov. For elongated sections to be surveyed, the author recommends the use of traverses with the strict application of methods developed by A.S. Chebotarev

Card 12/13

S/154/61/000/001/001/003
D054/D113

Adjustment of levelling nets...

(Ref. 1) and V.V. Popov (Ref. 2). [Abstracter's note: Essentially complete translation] There are 4 Soviet references and 2 figures.

ASSOCIATION: Stalingradskiy institut inzhenerov gorodskogo khozyazstva (The Stalingrad Institute of Engineers of the Municipal Economy)

SUBMITTED: February 23, 1960

Card 13/13

GANSHIN, V.N., prof.

Comparsion of azimuths of a normal section with those of the geodesic. Izv. vys. ucheb. zav.,geod. i aerof. no.2:9-12 '62.
(MIRA 15:9)

1. Volgogradskiy institut inzhenerov gorodskogo khozyaystva.
(Azimuth)

S/035/62/000/003/034/053
A001/A101

16.5000

AUTHOR: Gan'shin, V. N.

TITLE: Reasonal proposals for the solution of the first (direct) problem by Bessel's method

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 3, 1962, 23-24, abstract 3G181 ("Izv. vyssh. uchebn. zavedeniy. Geod. i aerofotos" yemka", 1961, no. 3, 45-51)

TEXT: The formula is presented which enables one to calculate directly arc $\breve{\sigma}$ on Bessel's sphere using the following data: arc length S of the geodesic line on the ellipsoid, its azimuth A at the initial point, and reduced latitude U_1 of this latter,

$$\breve{\sigma} = S_1 + (I)[n_o/2 + (II)(n_o/2)^2 + (III)(n_o/2)^3 + \ldots],$$

where $S_1 = S_o - (1/8)\, n_o^2 \sin 2 S_o$; $S_o = S/R_o$;

$$n_o = (k^2/4) - 2(k^2/4)^2 + 5(k^2/4)^3 - 14\,(k^2/4)^4 + \ldots$$

Card 1/3

S/035/62/000/003/034/053
A001/A101

Reasonal proposals for the solution ...

$$R_o = b[1 + (k^2/4) - (3/4)(k^2/4)^2 + (5/4)(k^2/4)^3 - (175/64)(k^2/4)^4 + \ldots]$$

$$k^2 = e'^2 (1 - c^2); \quad c = \cos U_1 \sin A_1$$

$$(I) = \sin 2 (M_1 + S_1) - \sin 2 M_1;$$

$$II = (1/2)[5 \cos 2 (M_1 + S_1) + \cos 2 M_1];$$

$$III = (1/6)[29 \cos 4(M_1 + S_1) + 2 \cos 4 M_1 + 7 \cos 2 S_1 - \cos (4 M_1 + 2 S_1) - 1]$$

$$tgM_1 = tg U_1/\cos A_1.$$

It is recommended to compile tables for the quantities n_o and $(R_o - b)$ and graphs for (III). (These tables and graphs will be useful also for solving the direct problem relative to elements of the normal section. Reviewer). The author derives a relationship between the differences of longitudes $(\omega - l)$ on Bessel's sphere and on the ellipsoid in the form of a function of the difference

Card 2/3

S/035/62/000/003/034/053
A001/A101

Reasonal proposals for the solution ...

of arcs $(\tilde{\sigma} - S_0)$: $(\tilde{\sigma} - 1) = e^2 c/2)[(1 + n - (1/2)\ n_0)\ \tilde{\sigma} + (1/2)(1 + n_0)\ (\tilde{\sigma} - S_0)]$ + r, where $n = (a - b)/(a + b)$ and $r = \Delta_2 - \Delta_1$, where Δ_1 and Δ_2 are functions of constant c respectively quantities M_1 and $(M_1 + \tilde{\sigma})$ (?) are taken from the presented graph (in the article this graph is erroneously referred to quantity III. Reviewer).

V. Ganshin

[Abstracter's note: Complete translation]

Card 3/3

GAN'SHIN, V.N.

Formulas for the solution of spherical quadrangles. Geod. i kart. no.9:26-29 S '61. (MIRA 14:9)
(Polygons)

GAN'SHIN, V.N.

"Gauss-Kruger coordinates on the ellipsoid of revolution" by V. K. Khristov. Reviewed by V.N.Gan'shin. Geod. i kart. no.11:72-75 N '61. (MIRA 15:1)

(Coordinates) (Khristov, V.K.)

16 6500

S/035/62/000/007/078/083
A001/A101

AUTHORS: Khrenov, L. S.; Gan'shin, V. N.

TITLE: Fundamental tables of natural values of trigonometric functions

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 7, 1962, 29, abstract 7G214 ("Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva", 1961, no. 67, 247 - 257)

TEXT: The authors discuss the problems of precision of multi-digit tables for natural values of trigonometric functions. They point out that fundamental 10-digit tables are being devised which are compiled according to the principle of retaining 10 non-zero digits. The first part of the planned tables contains natural values of functions cosec and ctg for arguments from 0 to 6° with intervals of one arc second. Second differences are presented for square interpolation. The second part contains natural values of all six trigonometric functions for angles from 0 to 45° with intervals of 10". In these tables, all first and second differences are given for arguments from 0 to 6° for functions sin, tg, sec and cos, but for functions cosec and ctg no table differences are given, which indicates the necessity of using, in interpolations, the values

Card 1/2

Fundamental tables of...

S/035/62/000/007/078/083
A001/A101

of these functions placed in the first part of the tables. Only first differences are given for functions sin, tg, sec and cos for arguments from 6 to 10°, but all values of first and second differences are given for functions cosec and ctg for each 10" interval. Only first differences are given for all six functions from 10 to 45°. The content is illustrated by graphs and tables.

I. Shelikhova

[Abstracter's note: Complete translation]

Card 2/2

GAN'SHIN, V.N.

"Theory of measurement errors" by IU.V.Kemnits. Reviewed by V.N. Gan'shin. Geod. i kart. no.1:71-75 Ja '62. (MIRA 15:1)
(Errors, Theory of) (Kemnits, IU.V.)

45322

S/154/62/000/006/001/002
D036/D114

16.5500

AUTHOR: Gan'shin, V.N., Professor

TITLE: Investigating an arbitrary normal section on an ellipsoid of rotation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, no. 6, 1962, 9-16

TEXT: An investigation is made into an arbitrary normal section on an ellipsoid of rotation, i.e. a section which passes through two given points and is normal in respect to a certain third point. Generalized formulae are given for the arbitrary normal section, its position, the difference between the lengths of the geodesic and the arc of the section, the minimum length of the section, the azimuth of the section at an arbitrary point, and the length of the section's arc. The particular case of a right normal section is discussed. There are 4 figures and 2 tables.

ASSOCIATION: Leningradskiy institut inzhenerov zheleznodorozhnogo transporta (Leningrad Institute of Railroad Transportation Engineers)

SUBMITTED: July 26, 1962

Card 1/1

BUTKEVICH, A.V.; ANGELOV, S.A.; GAN'SHIN, V.N.

Authorship of tables. Geod.i kart. no.10:66-68 O '62.
(MIRA 15:12)
(Surveying—Tables, Etc.)

GAN'SHIN, V.N.

"Surveying and staking operations in industrial and civil engineering" by P.I. Poliakov, L.U. Seliukov, S.I. Shchirin; "Principles of surveying for construction and assembly work" by M.M. Livanov. Geod. i kart. no.11:69-74 N '62. (MIRA 15:12)
(Surveying)
(Building sites)
(Poliakov, P.I.) (Seliukov, L.U.) (Shchirin, S.I.)
(Livanov, M.M.)

KHRENOV, Leonid Sergeyevich; GAN'SHIN, V.N., red.; RYBKIN, A.Z., red.; AKSEL'ROD, I.Sh., tekhn. red.

[Small calculating machines] Malye vychislitel'nye mashiny; kratkoe spravochnoe rukovodstvo. Izd.3., perer. Moskva, Fizmatgiz, 1963. 212 p. (MIRA 16:8)
(Calculating machines)